POS 360 Series

User Manual

Point-of-Sale Hardware System

2007 January V1.0

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Manual Version 1.0

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Safety

IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrial power supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart,stand,or table.The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation;to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered.The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.This product should never be placed near or over a radiator or heat register,or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label.If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

CE MARK

CE This device complies with the requirements of the EEC directive 89/336/EEC with regard to “Electromagnetic compatibility” and 73/23/EEC “Low Voltage Directive”.

FCC

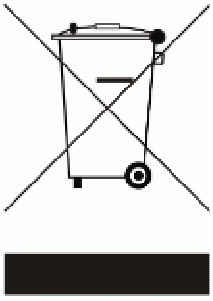
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

LEGISLATION AND WEEE SYMBOL

2002/96/EC Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dustbin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.
To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

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1. Item Checklist

Take the system unit out of the carton. Remove the unit from the carton by holding it by the foam inserts. The following contents should be found in the carton:

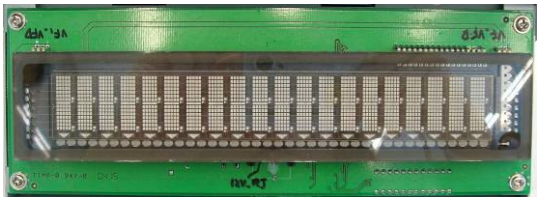
1.1. Standard Items

a. Driver CD

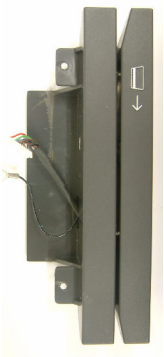
b. System

c. Power Cable

1.2. Optional Items



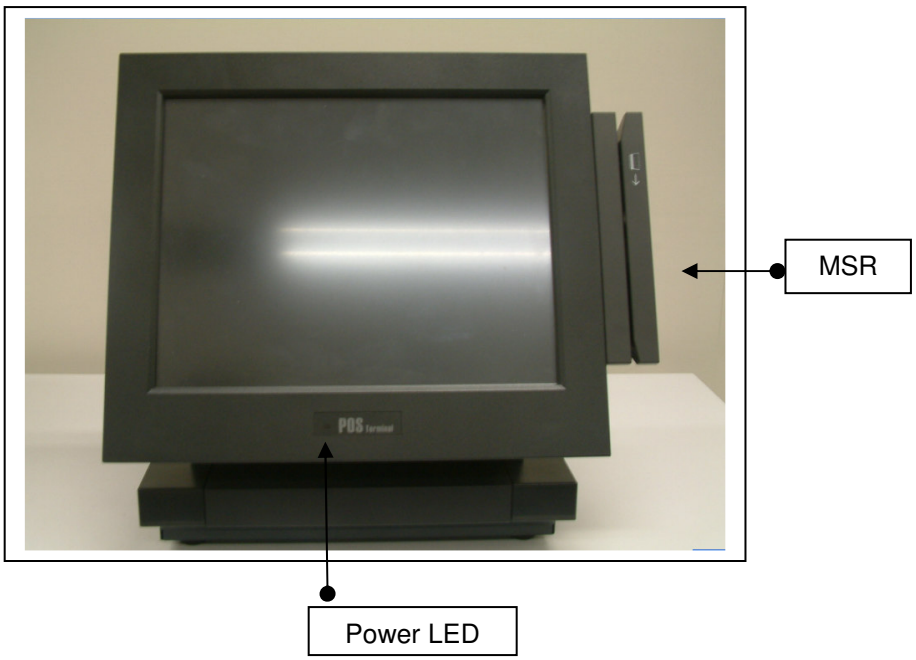
a. Customer Display



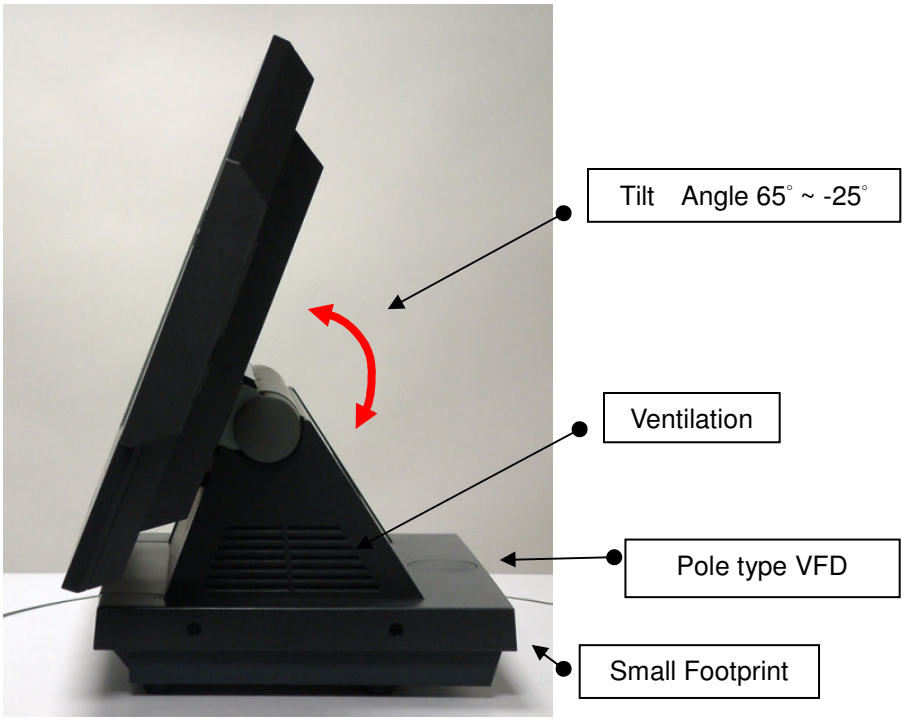
b. MSR

2. System View

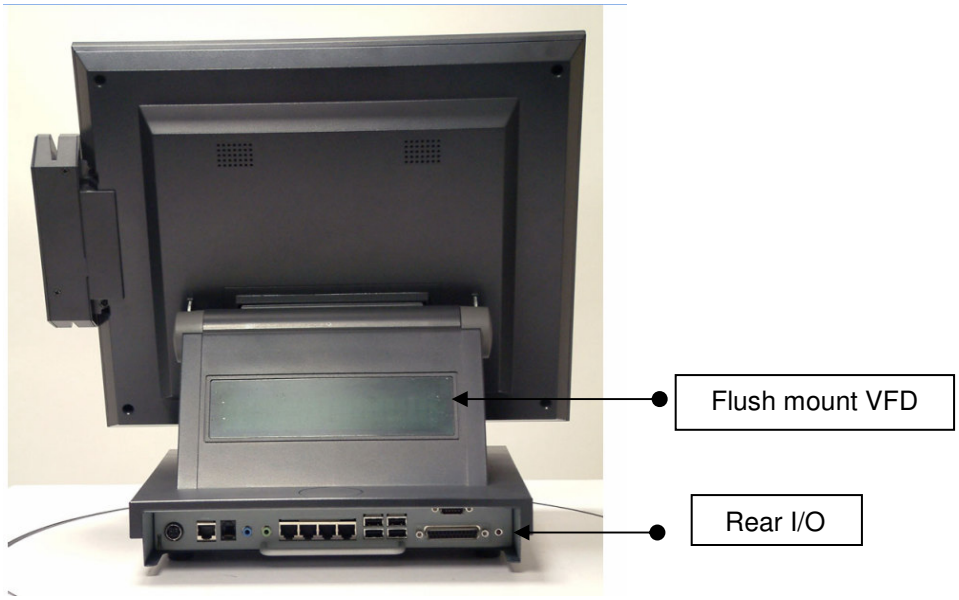
2.1. Front View



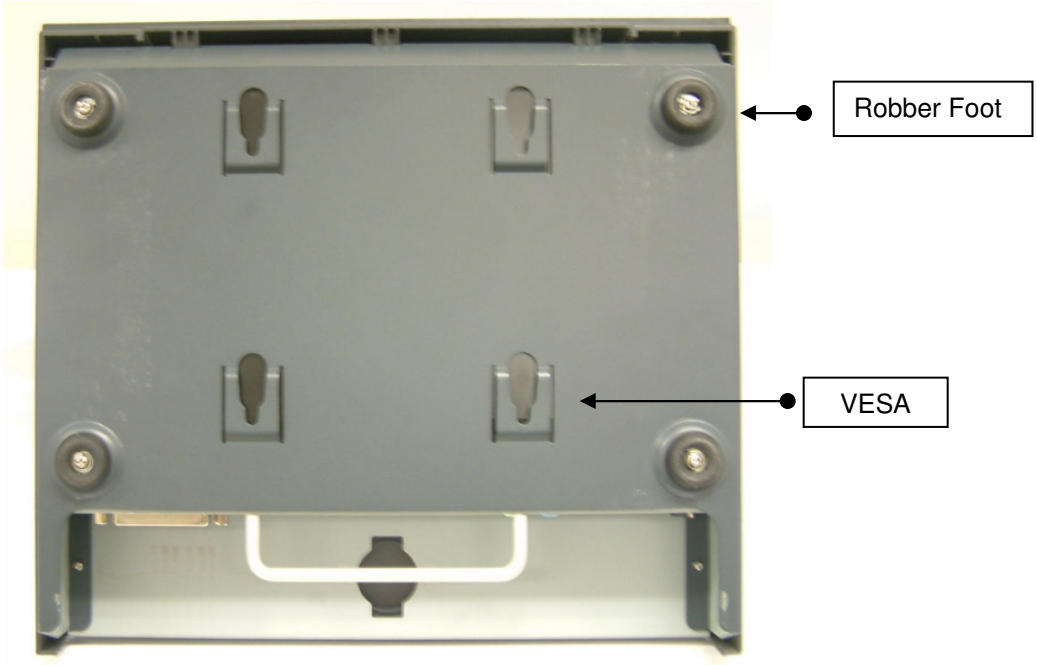
2.2. Side View



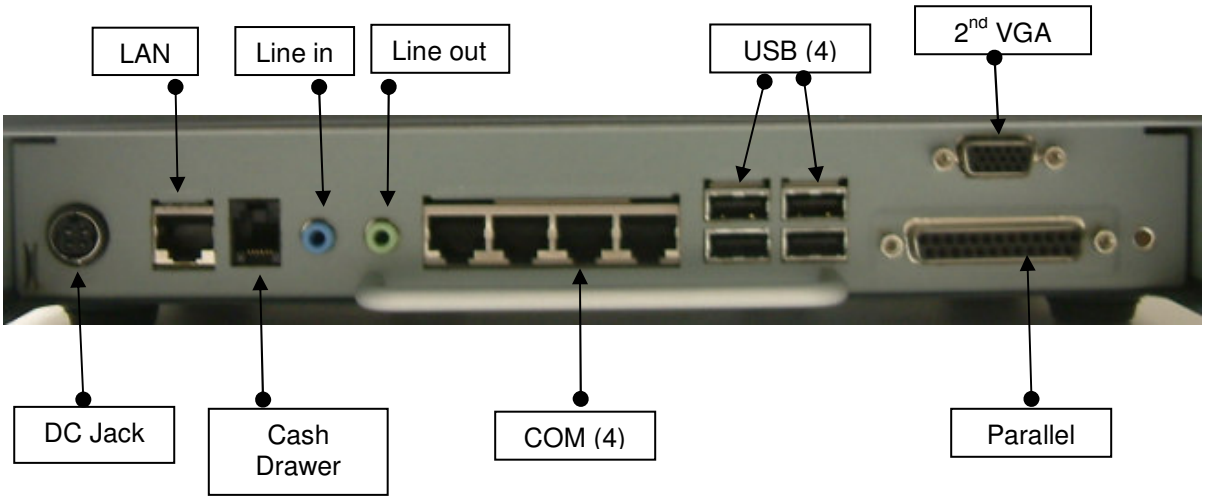
2.3. Rear View



2.4. Bottom View



2.5. I/O View



Note: The maximum current that can be drawn from each COM port is 500 mA. Only one PS/2 keyboard can be connected to the system: either on the side or in the rear.

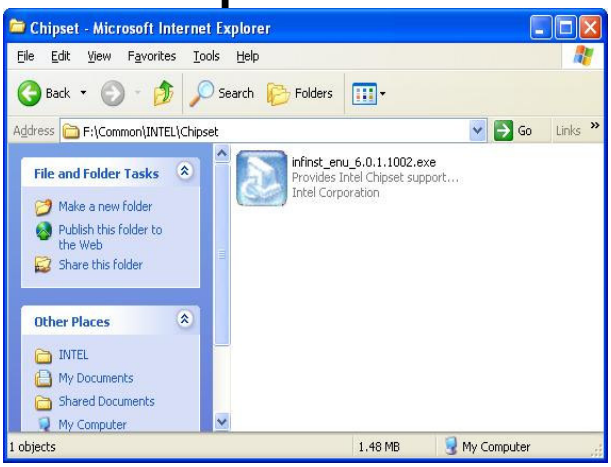
3. Driver Installation

3.1. Driver List

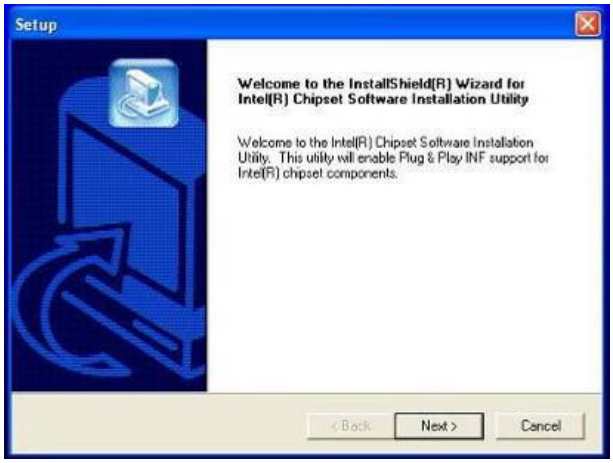
Folder/File	File Description
<CD>:\POS360_B78.htm	B78 Driver List
<CD>:\COMMON\INTEL\Chipset	Chipset Driver
<CD>:\COMMON\INTEL\USB 20	USB 2.0 Driver
<CD>:\COMMON\INTEL\VGA\i85x	VGA Driver
<CD>:\COMMON\Elo_Touch	ELO Touch Driver
<CD>:\COMMON\POS_Touch	POSTouch Driver
<CD>:\COMMON\Lan_driver\R8139_810x\V3.00.504	10/100Mb LAN Driver

-The following procedures are for Windows 2000/XP, other platforms are similar.

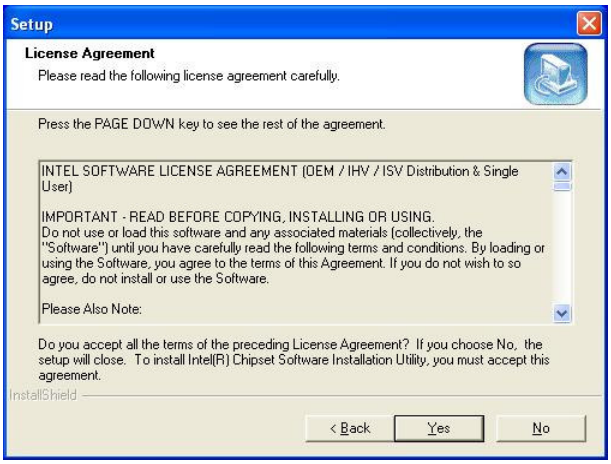
3.2. Chipset Driver Installation



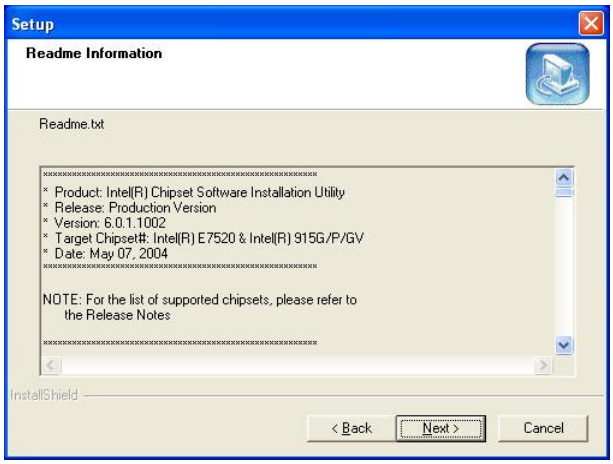
a. Double click “infinst_enu_6.0.1.1002” on the My computer window.


Setup
Welcome to the InstallShield(R) Wizard for Intel(R) Chipset Software Installation Utility
Welcome to the Intel(R) Chipset Software Installation Utility. This utility will enable Plug & Play INF support for Intel(R) chipset components.
< Back
Next >
Cancel

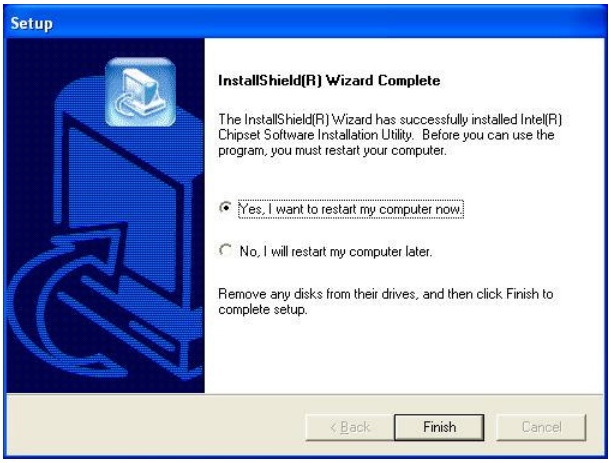
b. Click the “Next” button on the Welcome window.


Setup
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Intel(R) Chipset Software Installation Utility, you must accept this agreement.
InstallShield
< Back
Yes
No

c. Click the “Yes” button on the License Agreement window.


Setup
Readme Information
Readme.txt
* Product: Intel(R) Chipset Software Installation Utility
* Release: Production Version
* Version: 6.0.1.1002
* Target Chipset#: Intel(R) E7520 & Intel(R) 915G/P/GV
* Date: May 07, 2004
NOTE: For the list of supported chipsets, please refer to the Release Notes
InstallShield
< Back
Next >
Cancel

d. Click the ”Next” button on the Readme Information window.

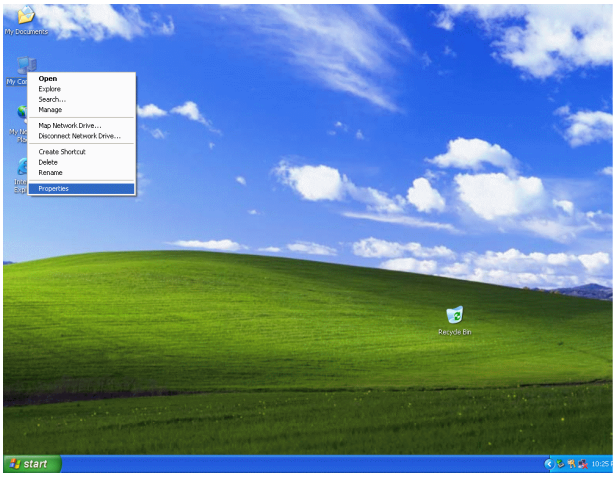

Setup
InstallShield(R) Wizard Complete
The InstallShield(R) Wizard has successfully installed Intel(R) Chipset Software Installation Utility. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

e. Click the “Finish” button and restart your system.

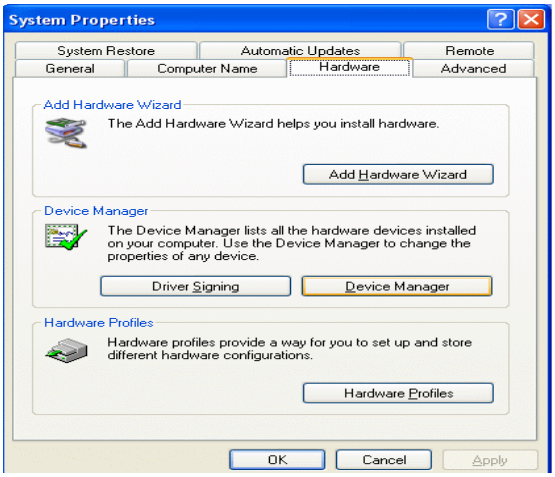
3.3. USB 2.0 Driver Installation

OS Requirements

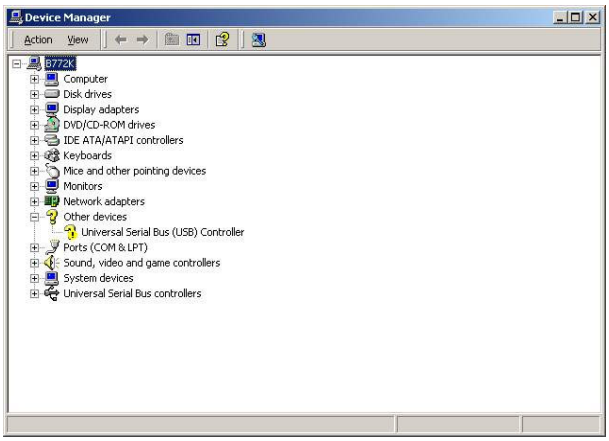
OS	USB 2.0 requirements
Windows XP	USB 2.0 drivers are provided in Service Pack 1 (SP1) for Windows XP, which is available through Windows Update.
Windows 2000	USB 2.0 drivers are available through Windows Update or Service Pack 4.
Windows 98SE/Me	USB 2.0 drivers are available on the Intel developer site.
Windows 98 (Retail)	Developers and OEMs should contact Orange Ware. For end-users, if your device does not ship with Windows 98 drivers, contact your device or system manufacturer. If USB 2.0 drivers are not available, your device will operate at USB 1.1 speeds
Linux	USB 2.0 support is available in kernel 2.4.19 or later development kernels, or in the 2.4.19 or later production kernel. More information.

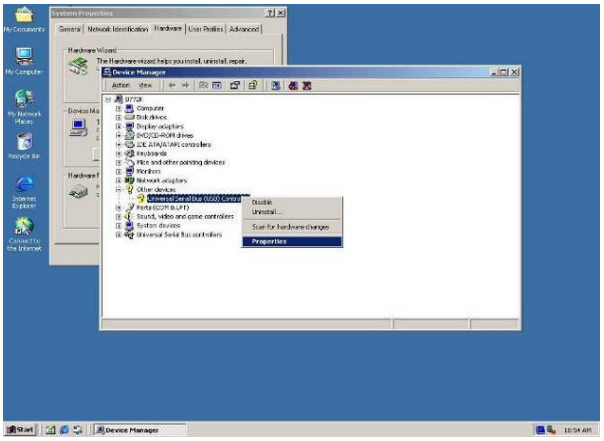


a. Right click My Computer on the desktop and select “properties”



b. Select “Hardware”→”Device Manager” on system properties.





c. Select ”Other Devices” → “Universal Serial Bus (USB) Controller” →”Properties” on Device Manager.

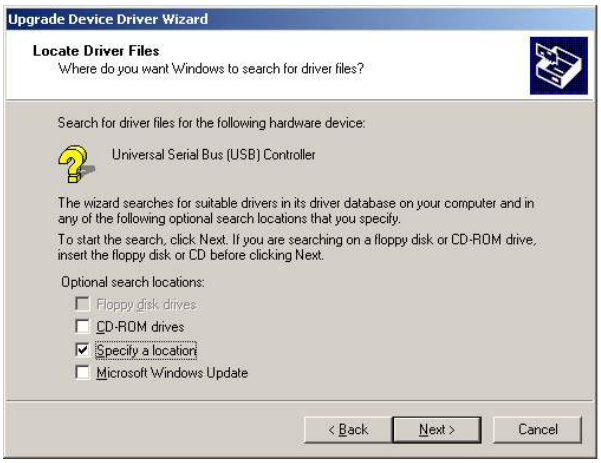
Universal Serial Bus (USB) Controller Properties
General
Driver
Resources
Universal Serial Bus (USB) Controller
Driver Provider: Unknown
Driver Date: Not available
Driver Version: Not available
Digital Signer: Not digitally signed
No driver files are required or have been loaded for this device. To uninstall the driver files for this device, click Uninstall. To update the driver files for this device, click Update Driver.
Driver Details...
Uninstall
Update Driver...
OK
Cancel

Upgrade Device Driver Wizard
Welcome to the Upgrade Device Driver Wizard
This wizard helps you upgrade a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

d. Select “Device”→ “Update Driver…”.

e. Click the ”Next” button on the welcome window.

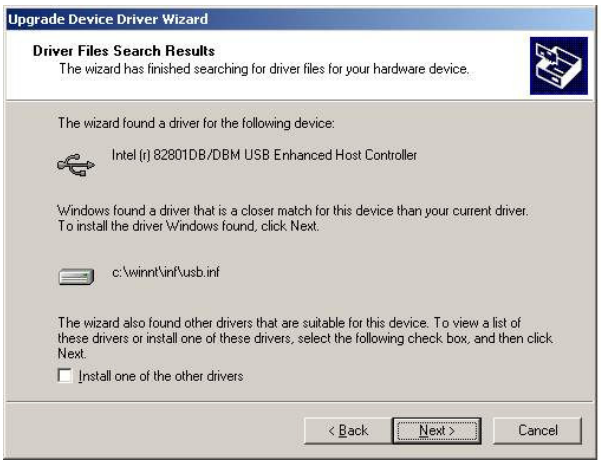
Upgrade Device Driver Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard upgrades drivers for the following hardware device:
Universal Serial Bus (USB) Controller
Upgrading to a newer version of a device driver may add functionality to or improve the performance of this device.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel


Upgrade Device Driver Wizard
Locate Driver Files
Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
Universal Serial Bus (USB) Controller
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update
< Back
Next >
Cancel

f. Select “Search for a suitable…”and click the “Next” button on the Install Hardware Device Drivers window.

g. Select “Specify a location” and click the “Next” button on the Locate Driver Files window.

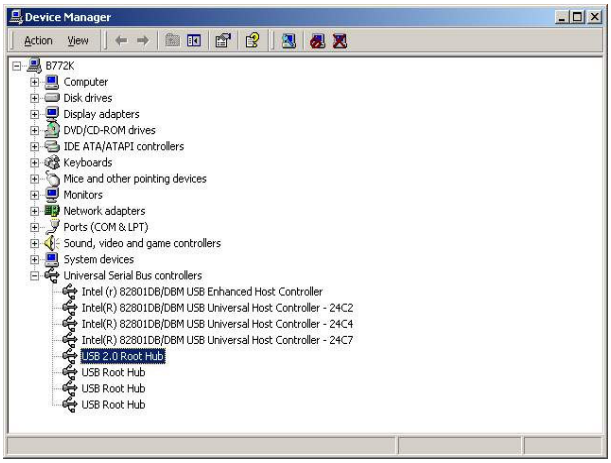
h. Press “Browse” to select the driver and then click the “OK” button to go to the next page.


Upgrade Device Driver Wizard
Driver Files Search Results
The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
Intel (r) 82801DB/DBM USB Enhanced Host Controller
Windows found a driver that is a closer match for this device than your current driver. To install the driver Windows found, click Next.
c:\winnt\inf\usb.inf
The wizard also found other drivers that are suitable for this device. To view a list of these drivers or install one of these drivers, select the following check box, and then click Next.
Install one of the other drivers
< Back
Next >
Cancel

i. Click the “Next” button on the Driver Files Search Results window.

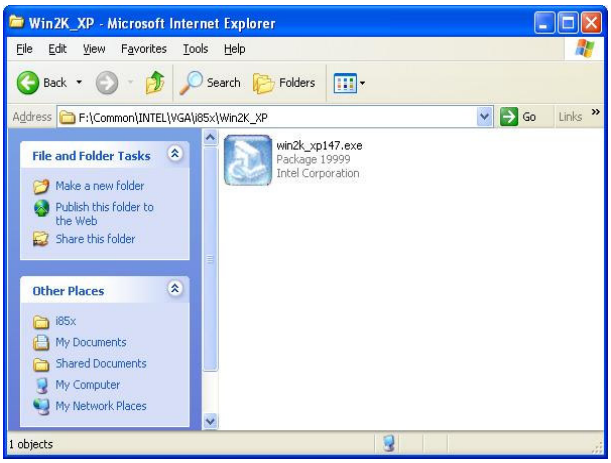
Upgrade Device Driver Wizard
Completing the Upgrade Device Driver Wizard
Intel (r) 82801DB/DBM USB Enhanced Host Controller
Windows has finished installing the software for this device.
To close this wizard, click Finish.
< Back
Finish
Cancel

j. Click the “Finish” button to complete this process.

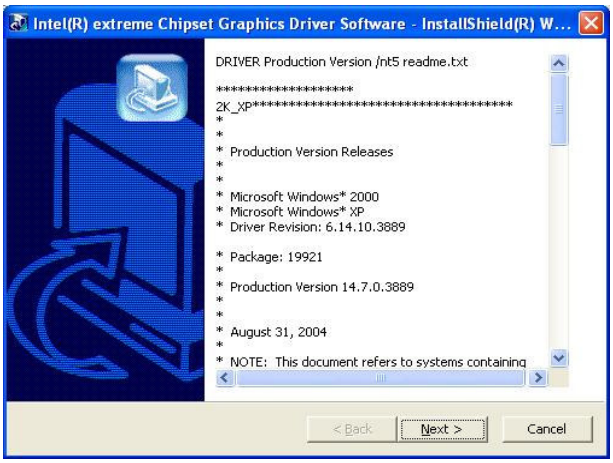


k. Finished.

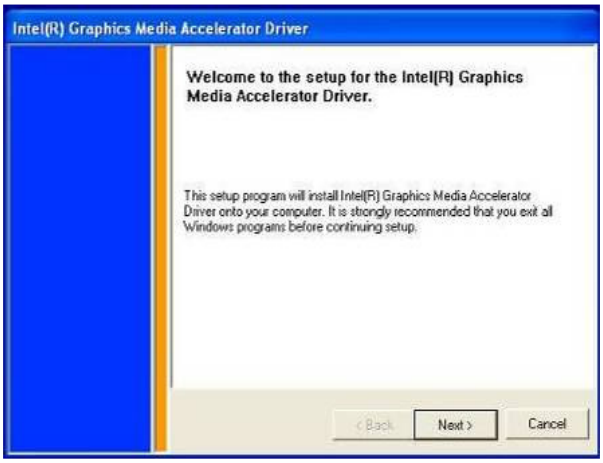
3.4. VGA Driver Installation



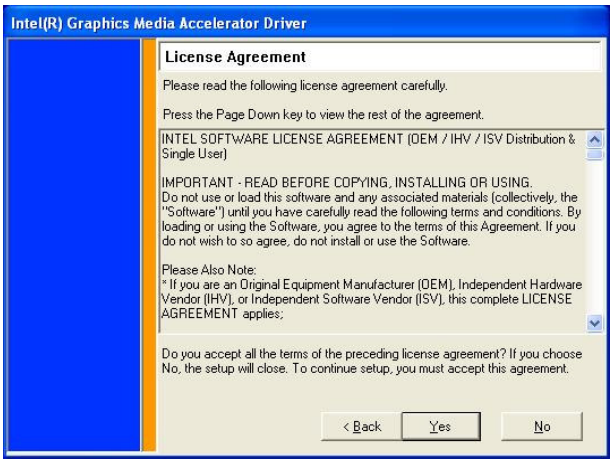
a. Double click “win2k_xp147” on the My Computer window.



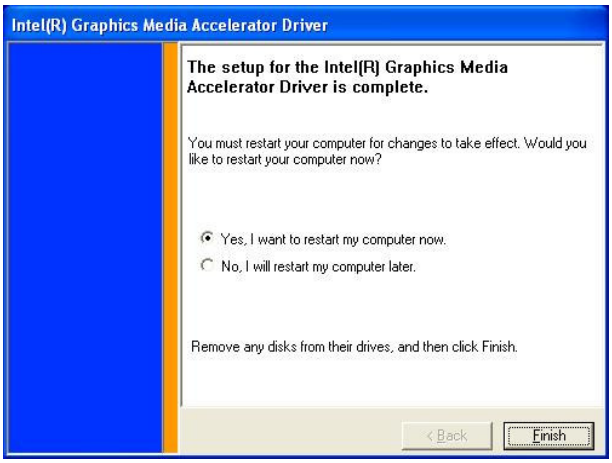
b. Click the “Next” button on the Welcome window.


Intel(R) Graphics Media Accelerator Driver
Welcome to the setup for the Intel(R) Graphics Media Accelerator Driver.
This setup program will install Intel(R) Graphics Media Accelerator Driver onto your computer. It is strongly recommended that you exit all Windows programs before continuing setup.
< Back
Next >
Cancel

c. Click the ”Next” button on the Welcome window.

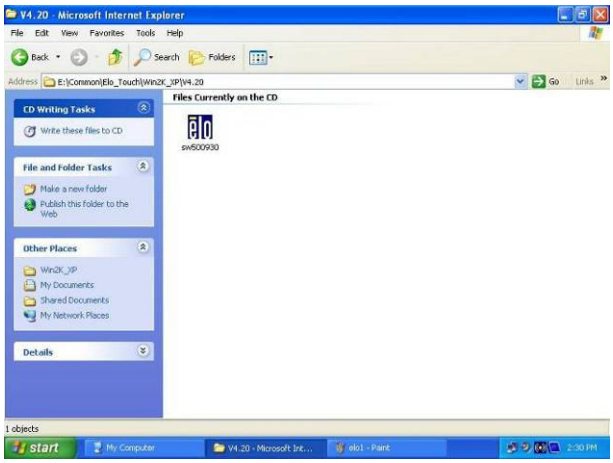

Intel(R) Graphics Media Accelerator Driver
License Agreement
Please read the following license agreement carefully.
Press the Page Down key to view the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
Do you accept all the terms of the preceding license agreement? If you choose No, the setup will close. To continue setup, you must accept this agreement.
< Back
Yes
No

d. Click the ”Yes” button on the License Agreement window.


Intel(R) Graphics Media Accelerator Driver
The setup for the Intel(R) Graphics Media Accelerator Driver is complete.
You must restart your computer for changes to take effect. Would you like to restart your computer now?
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish.
< Back
Finish

e. Click the ”Finish” button and restart your system.

3.5. ELO Touch Driver Installation



a. Click ”sw500930” on the My computer window.

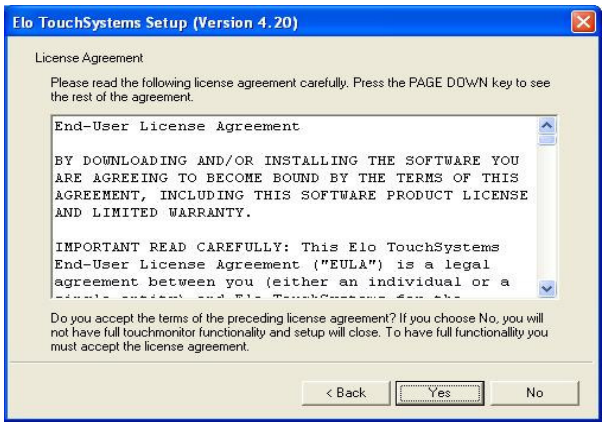
WinZip Self-Extractor
Welcome to Elo Universal Driver for Windows XP/2000 Installer.
Driver Version 4.20 (12-06-2004)
Click OK to continue.
OK

b. Click the “OK” button on the Welcome window.

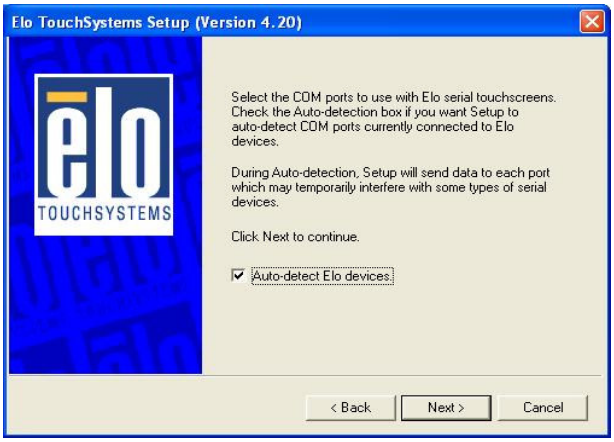
c. Click the ”Unzip” button on the WinZip Self-Extractor window.

Elo TouchSystems Setup (Version 4.20)
TOUCHSYSTEMS
Welcome to Elo Touchscreen Setup.
This program will install the Elo USB and Serial touchscreen drivers on your computer. It is strongly recomended that you exit all Windows programs before running this Setup program.
Install Serial Touchscreen Drivers
Install USB Touchscreen Drivers
< Back
Next >
Cancel

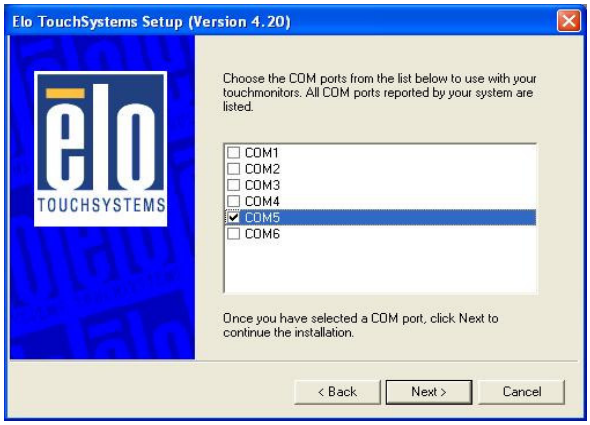
d. Select “Install Serial Touchscreen Drivers” and then click the “Next” button on the Welcome window.


Elo TouchSystems Setup (Version 4.20)
License Agreement
Please read the following license agreement carefully. Press the PAGE DOWN key to see the rest of the agreement.
End-User License Agreement
BY DOWNLOADING AND/OR INSTALLING THE SOFTWARE YOU ARE AGREEING TO BECOME BOUND BY THE TERMS OF THIS AGREEMENT, INCLUDING THIS SOFTWARE PRODUCT LICENSE AND LIMITED WARRANTY.
IMPORTANT READ CAREFULLY: This Elo TouchSystems End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a
Do you accept the terms of the preceding license agreement? If you choose No, you will not have full touchmonitor functionality and setup will close. To have full functionality you must accept the license agreement.
< Back
Yes
No

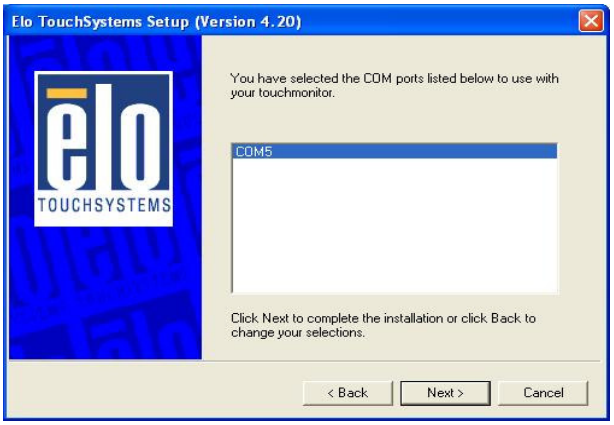
e. Click the “Yes” button on the License Agreement window.


Elo TouchSystems Setup (Version 4.20)
Select the COM ports to use with Elo serial touchscreens. Check the Auto-detection box if you want Setup to auto-detect COM ports currently connected to Elo devices.
During Auto-detection, Setup will send data to each port which may temporarily interfere with some types of serial devices.
Click Next to continue.
Auto-detect Elo devices
< Back
Next >
Cancel

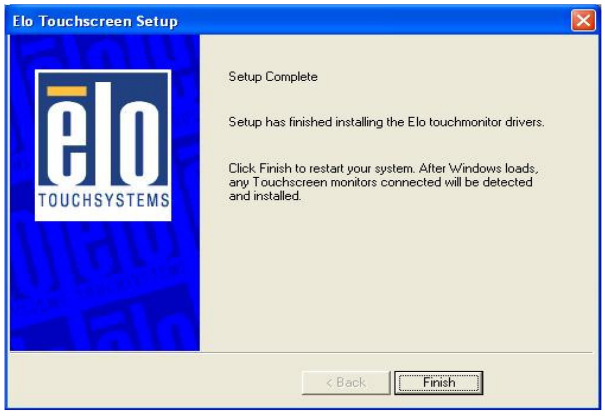
f. Click the “Next” button on the on the “Select the COM ports…” window.


Elo TouchSystems Setup (Version 4.20)
Choose the COM ports from the list below to use with your touchmonitors. All COM ports reported by your system are listed.
COM1
COM2
COM3
COM4
COM5
COM6
Once you have selected a COM port, click Next to continue the installation.
< Back
Next >
Cancel

g. Select “COM5” and click the “Next” button on the Choose the COM ports… window.


Elo TouchSystems Setup (Version 4.20)
You have selected the COM ports listed below to use with your touchmonitor.
COM5
Click Next to complete the installation or click Back to change your selections.
< Back
Next >
Cancel

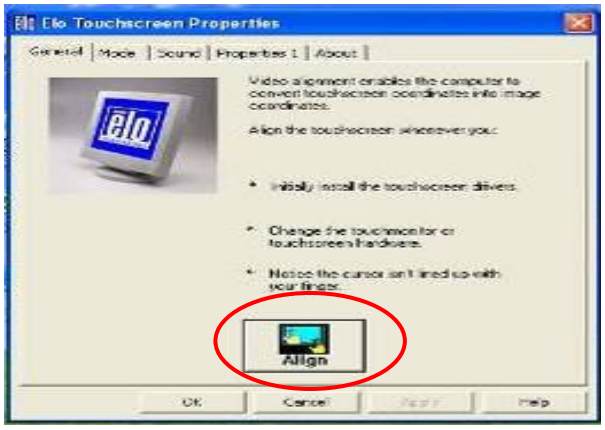
h. Click the “Next” button on the You have selected the COM ports…window.


Elo Touchscreen Setup
Setup Complete
Setup has finished installing the Elo touchmonitor drivers.
Click Finish to restart your system. After Windows loads, any Touchscreen monitors connected will be detected and installed.
< Back
Finish

i. Click the “Finish” button on the Setup Complete window

System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

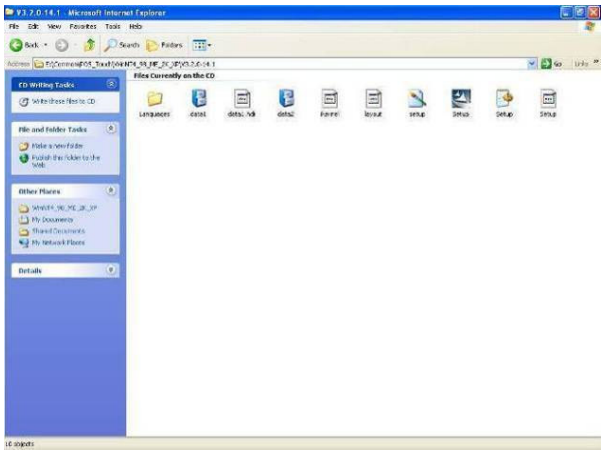
j. Click the “Yes” button and restart your system.



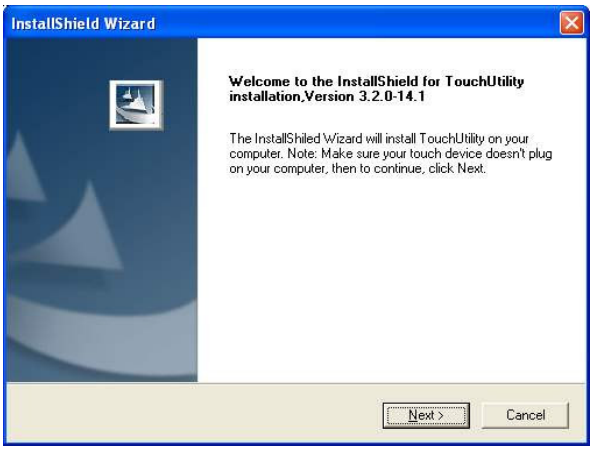
k. After the computer has restarted, click “Align” on the Elo Touchscreen Properties window.

l. Follow the instructions on the screen to calibrate the touch panel.

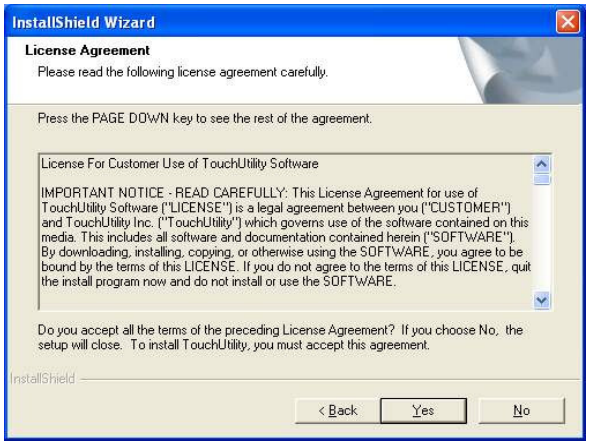
3.6. POSTouch Driver Installation



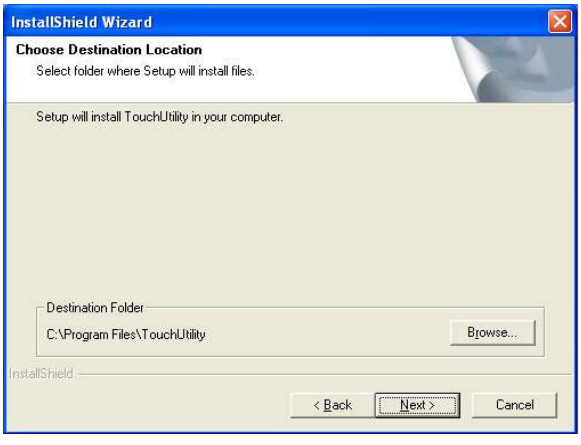
a. Double click the ”Setup” on the “My Computer” window.


InstallShield Wizard
Welcome to the InstallShield for TouchUtility installation,Version 3.2.0-14.1
The InstallShiled Wizard will install TouchUtility on your computer. Note: Make sure your touch device doesn't plug on your computer, then to continue, click Next.
Next >
Cancel

b. Click the “Next“ button on the “Welcome window”.

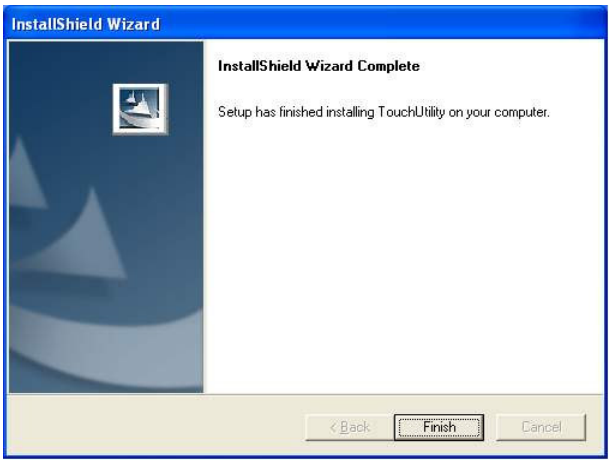

InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
License For Customer Use of TouchUtility Software
IMPORTANT NOTICE - READ CAREFULLY: This License Agreement for use of TouchUtility Software ("LICENSE") is a legal agreement between you ("CUSTOMER") and TouchUtility Inc. ("TouchUtility") which governs use of the software contained on this media. This includes all software and documentation contained herein ("SOFTWARE"). By downloading, installing, copying, or otherwise using the SOFTWARE, you agree to be bound by the terms of this LICENSE. If you do not agree to the terms of this LICENSE, quit the install program now and do not install or use the SOFTWARE.
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install TouchUtility, you must accept this agreement.
InstallShield
< Back
Yes
No

c. Click the ”Yes” button on the “License Agreement” window.



d. Click the ”Next” button on the “Choose Destination Location” window.

e. Click the “Next” button on the “Select Program Folder” window.



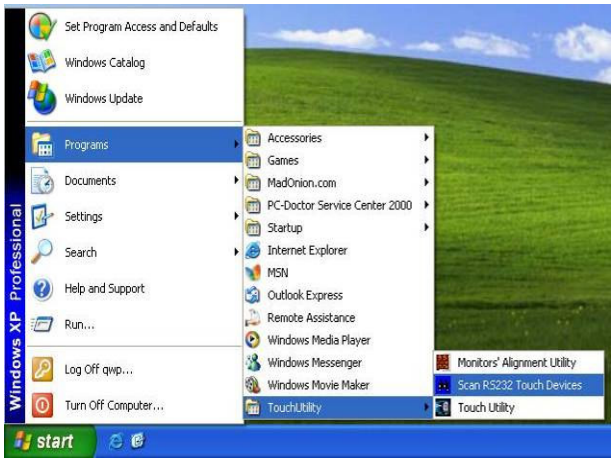
f. Click the “Finish” button on the “Install Shield Wizard Complete” window.

Hardware Installation
The software you are installing for this hardware:
TouchUtility RS232 Touch Panel
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

g. Click the “Continue Anyway “ button on the “Hardware Installation” window.

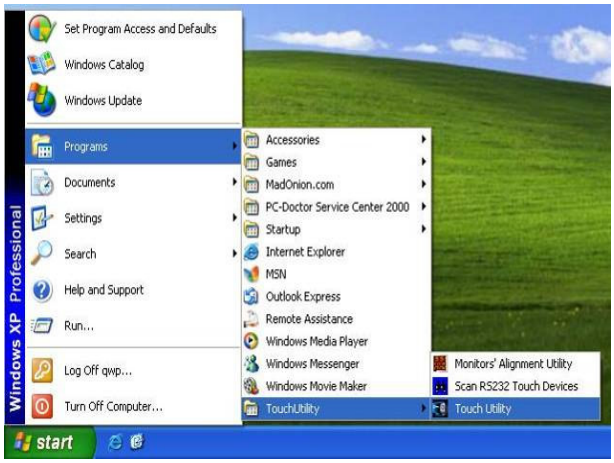
Note to reboot
Click <OK> to reboot, then plug your touch device on your device.
Yes, I want to restart my computer now.
No, I will restart my computer later.
OK

h. Select the “Yes” and click the ”OK” button and restart your system.

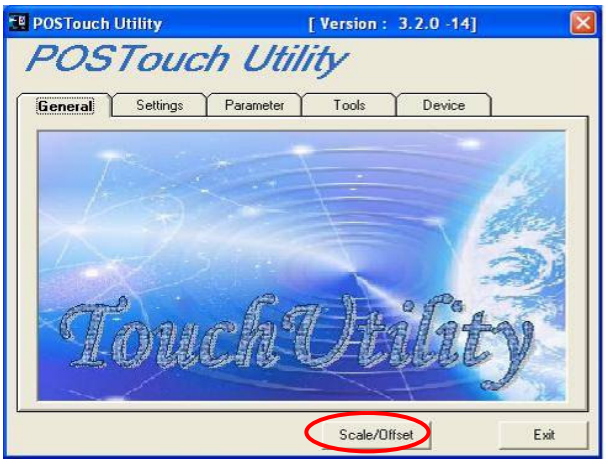


i. After the computer has restarted, select “Programs →TouchUtility →Scan RS232 Touch Device”.

j. The serial ports are scanned for a touch device.

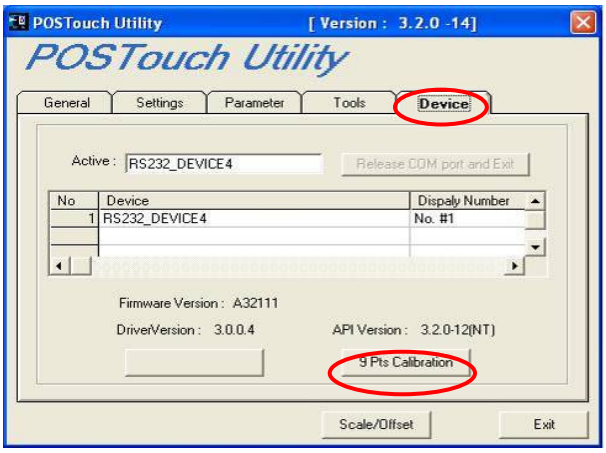


k. Select “Programs →TouchUtility →Touch Utility”.

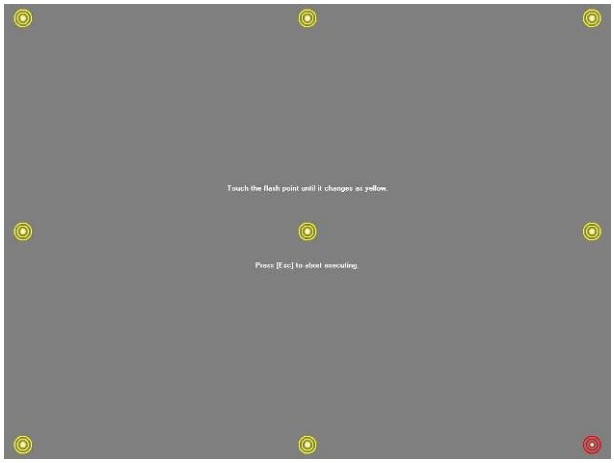


l. Click “Scale / Offset” on the POSTouch Utility window.

m. Follow the instructions on the screen to do a three point calibration of the touch panel.

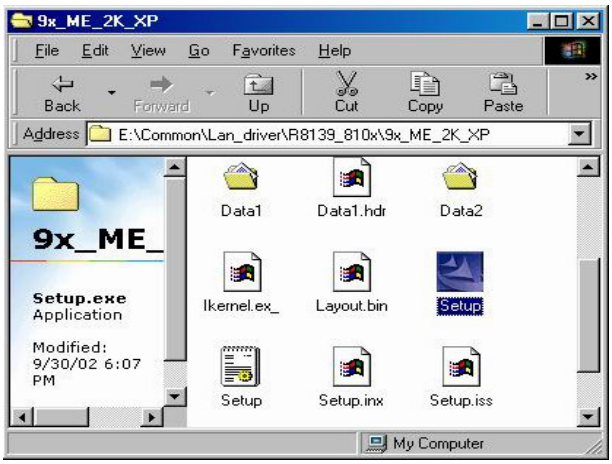


n. Select “Device →9Pts Calibration” on the POSTouch Utility window.

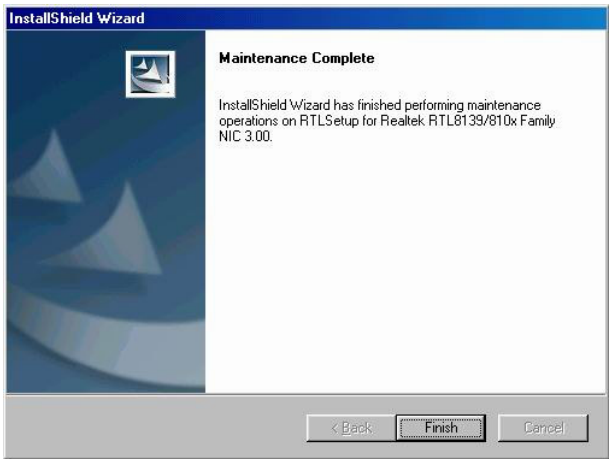


o. Follow the instructions on the screen to do a nine point calibration of the touch panel.

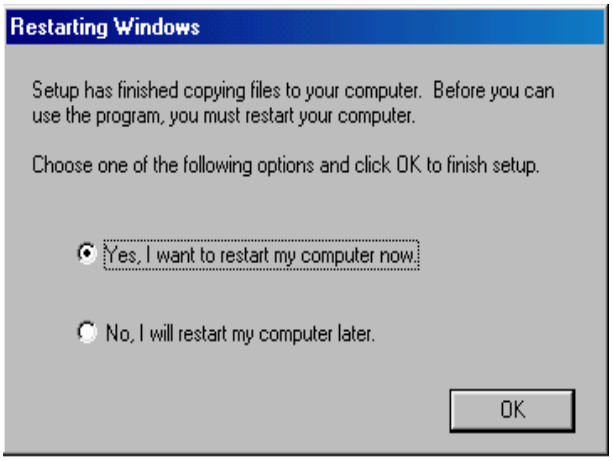
3.7. 10/100Mb LAN Driver Installation



a. Double click ”Setup” on the My Computer window.



b. Click the “Finish” button on the Maintenance Complete window.


Restarting Windows
Setup has finished copying files to your computer. Before you can use the program, you must restart your computer.
Choose one of the following options and click OK to finish setup.
Yes, I want to restart my computer now.
No, I will restart my computer later.
OK

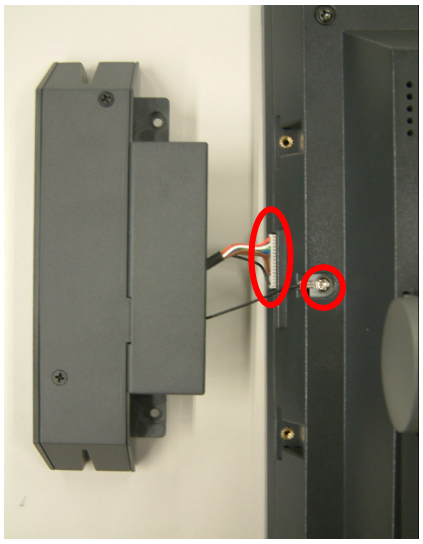
c. Click the ”OK” button and restart your system.

4. Peripherals Installation

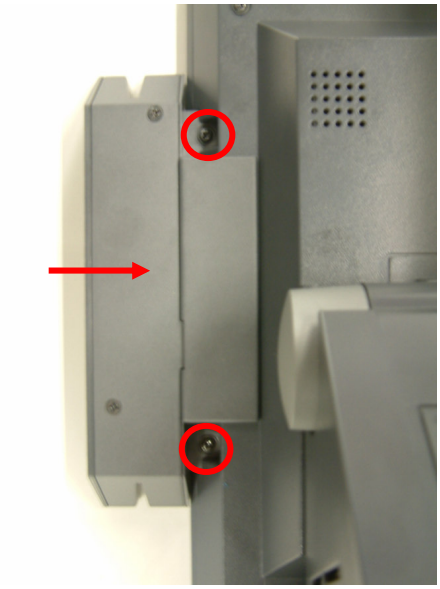
4.1. Magnetic Card Reader Installation

The MSR unit is tested and can be supplied at your request. This MSR is removed during transportation and can be connected by the user. There are two types of MSR Module: RS232 type and keyboard type.

a. Remove the screws (3) from the system.



b. Connect the MSR cable (1) and secure the grounding cable with screw (1).

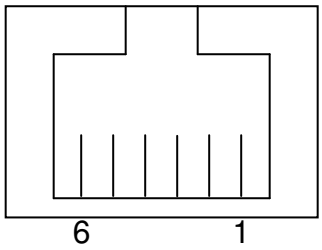


c. Place the MSR into the position and tighten the screws (2).

4.2. Cash Drawer Installation

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

4.2.1. Cash Drawer Pin Assignment



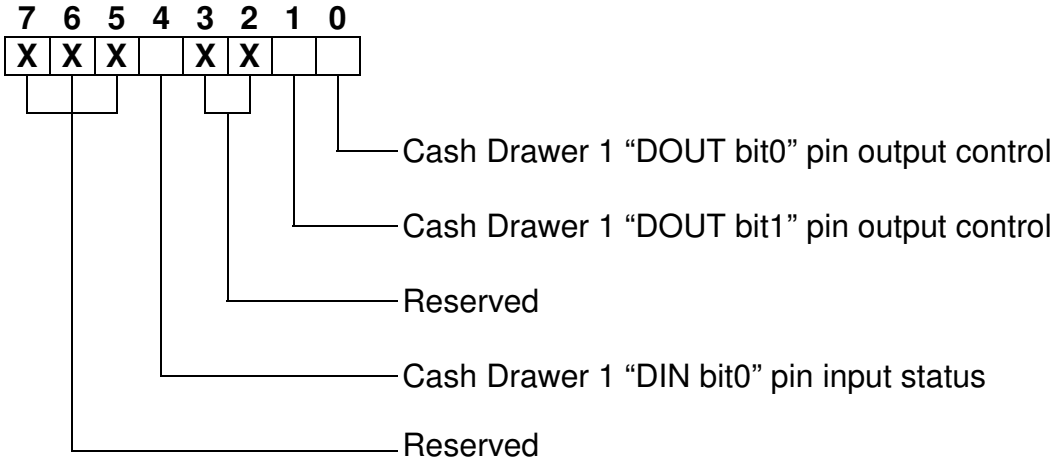
Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V / 24V
5	DOUT bit1
6	GND

4.2.2. Cash Drawer Controller Register

The Cash Drawer Controller use one I/O addresses to control the Cash Drawer. The Cash Drawer Control Register and the Cash Drawer Status Register.

Register Location: 4B8h
Attribute: Read / Write
Size: 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved	Reserved	Reserved	Read	Reserved	Reserved	Write	Write


7 6 5 4 3 2 1 0
X X X X X
Cash Drawer 1 “DOUT bit0” pin output control
Cash Drawer 1 “DOUT bit1” pin output control
Reserved
Cash Drawer 1 “DIN bit0” pin input status
Reserved

Bit 7: Reserved.
Bit 6: Reserved.
Bit 5: Reserved.

Bit 4: Cash Drawer “DIN bit0” pin input status.
= 1: the Cash Drawer closed or no Cash Drawer.
= 0: the Cash Drawer opened.
Bit 3: Reserved.
Bit 2: Reserved.
Bit 1: Cash Drawer “DOUT bit1” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow closing the Cash Drawer
Bit 0: Cash Drawer “DOUT bit0” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow closing the Cash Drawer

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

4.2.3. Cash Drawer Control Command Example

Use Debug.EXE program under DOS or Windows98

Command	Cash Drawer
O 4B8 01	Opening
O 4B8 00	Allow to closing
➢ Set the I/O address 4B8h bit0 =1 for opening the Cash Drawer by “DOUT bit0” pin control. ➢ Set the I/O address 4B8h bit0 = 0 to allow closing Cash Drawer.	

Command	Cash Drawer
I 4B8	Check status
➢ The I/O address 4B8h bit4 =1 means the Cash Drawer is closed or no Cash Drawer. ➢ The I/O address 4B8h bit4 =0 means the Cash Drawer is open.	

5. System Disassembly

5.1. Replacing HDD

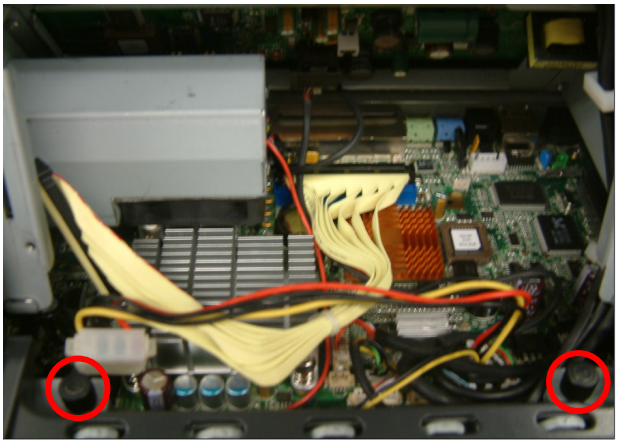
a. Loosen the thumb screws (2) to remove the front stand cover.

b. Lift the HDD holder up toward the direction as shown by the arrow...

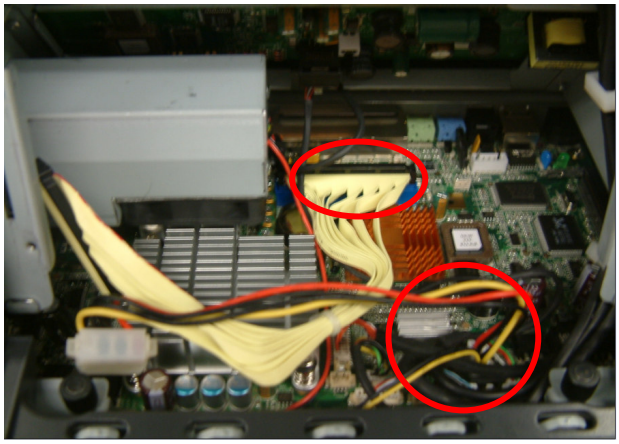
c. Remove the HDD from the holder and disconnect the cables (2).

5.2. Replacing Mainboard & I/O Board

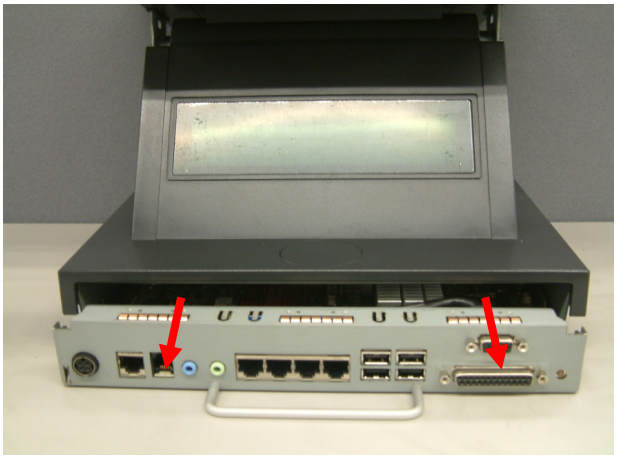
To replace Main Board and I/O Board, please first follow the steps in chapter 5.1.



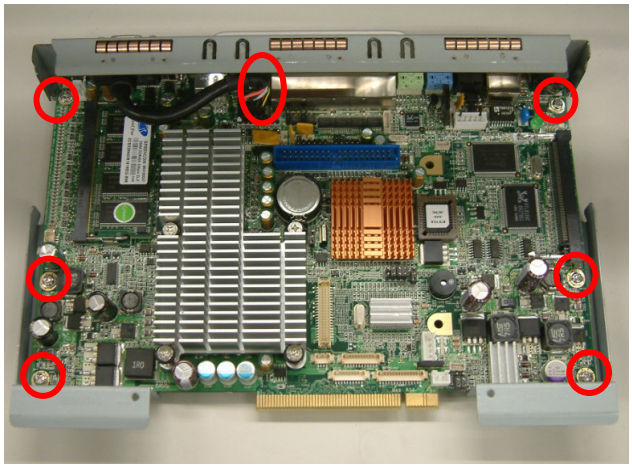
a. Loosen the thumb screws (2)



b. Disconnect the cables (8). IDE1 cable, HDD power cable ,MSR cable, Fan power cable, LVDS, Inverter cable, touch cable, VFD cable



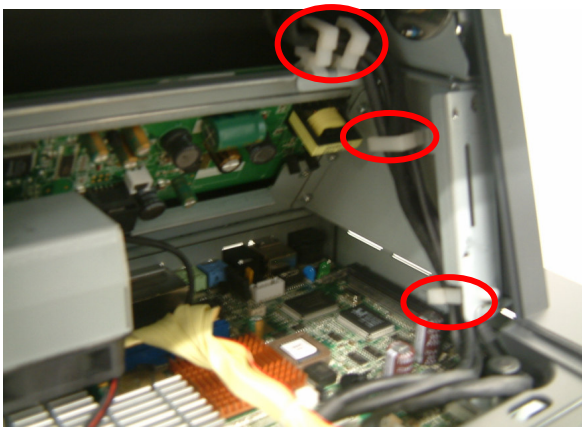
c. Pull the handle toward the direction as shown by the arrows



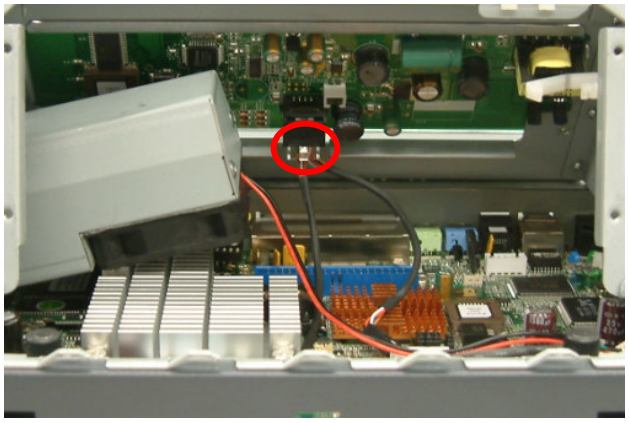
d. Remove the screws (6) and disconnect the 2nd VGA cable

5.3. Replacing the Customer Display

To replace the customer display, please first follow the steps in chapter 5.1., 5.2(b)



a. Unhook the cliffs(4) to

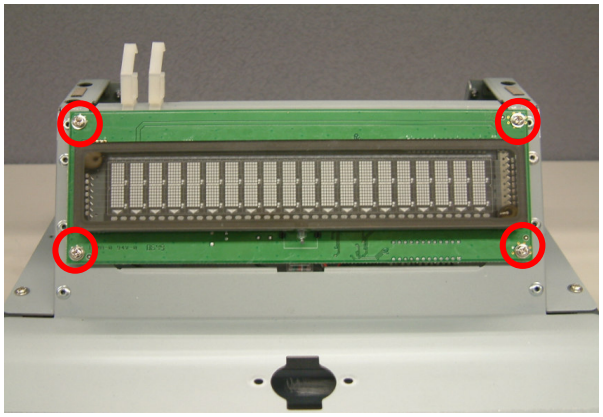


b. Remove the connector (1).

c. Remove the hinge covers(press and pull in the direction as shown by the arrows).

d. Remove the screws (6), 3 from each side to separate the monitor from the stand.

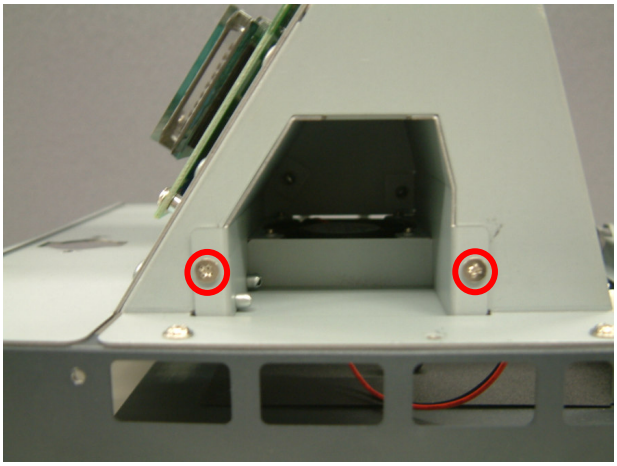
e. Remove the screws (4), 2 from each side to take the stand cover away from the system.



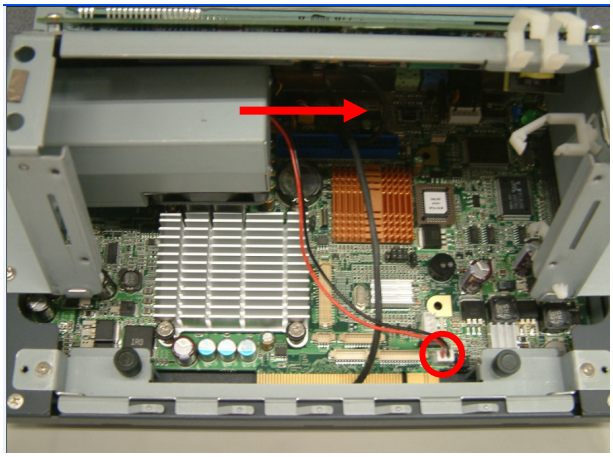
f. Remove the screws (4) to replace the customer display

5.4. Replacing the Fan

To replace the customer display, please first follow the steps in chapter 5.1., 5.2(b), 5.3(a)(c)(d)(e).



a. Remove the screws(2)

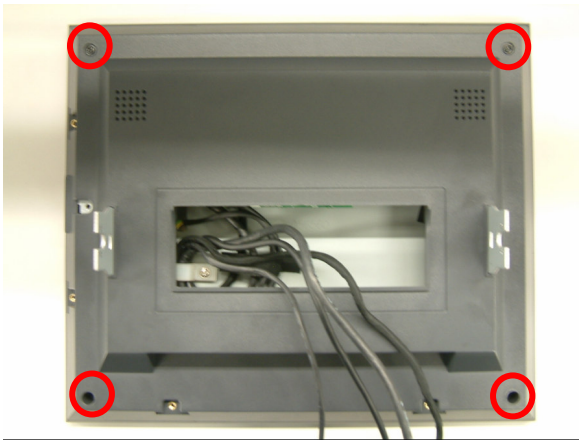


b. Disconnect the fan cable (2 pin) from mainboard and release the fan holder from the system

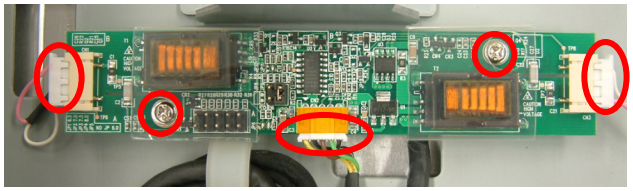
c. Remove the screws (4) to sparate the fan from the holder.

5.5. Replace Inverter Board & Touch Screen Board

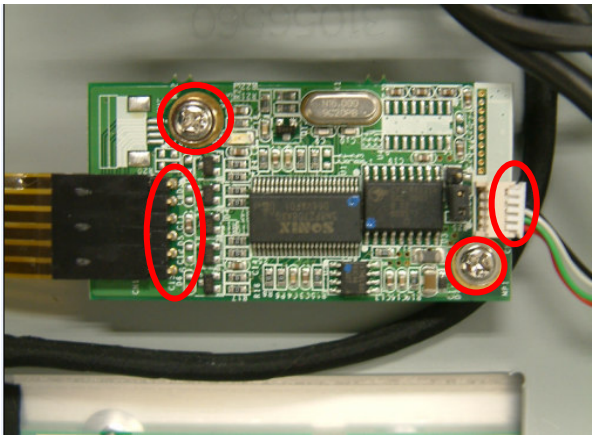
To replace the inverter board and touch screen board, please first follow the steps in chapter 5.1., 5.2(b), 5.3(a~d).



a. Remove the screws(4) and separate the back cover from the .



b. Remove the screws (2) and disconnect the cables(3).



c. Remove the screws (2) and disconnect the cables(2).

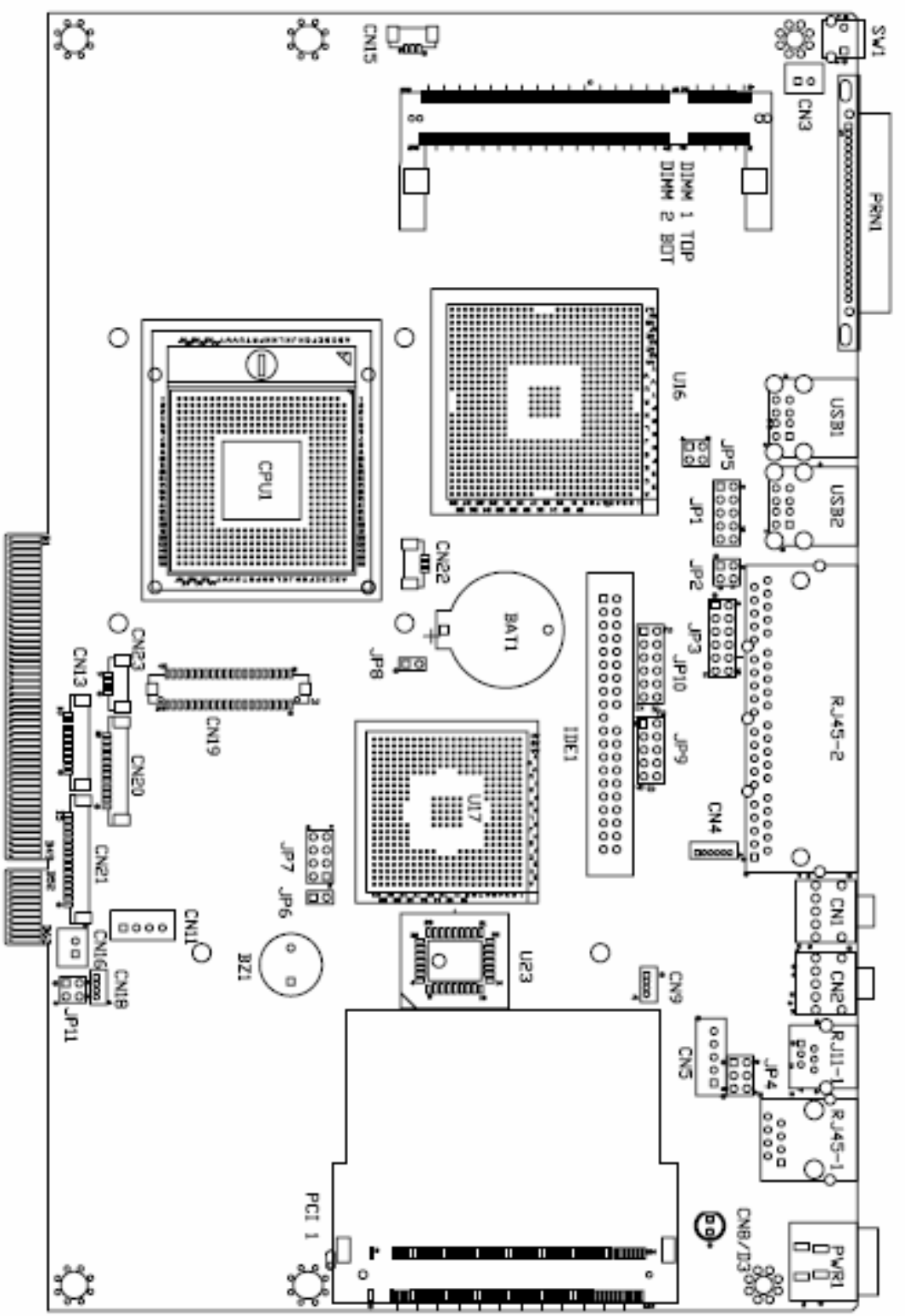
6. Specification

Main Name	POS 362	POS 365
Mainboard	B78	
CPU Supports	Intel Celeron M 1.3/ 1.5GHz; Pentium M 1.8GHz	
Chipset	Intel 852GM + ICH4	
System Memory	1 x DDR SO-DIMM slots, up to 1GB	
Graphic Memory	Share system memory up to 64MB	
LCD Panel		
LCD Size	12.1"TFT	15" TFT
Brightness (cd/m²)	up to 400 cd / m²	250 - 350cd / m²
Maximal Resolution	800 x 600 / 1024 x 768	1024 x 768
Touch Screen Type	Resistive	
Tilt Angle (Degree)	-25° ~ 65°	
Storage		
HDD	3.5" HDD bay	
Flash Memory	Compact Flash (Type I&II)	
Expansion		
Mini-PCI Socket	1 x mini-PCI slot	
Base Front I / O		
USB	4 (v2.0)	
Serial/COM	4 x COM ports RJ-45 connectors (COM1 standard RS-232; COM2 RS232/422/485 selectable by jumper; COM3 & COM4 pin 9 with 5V or 12V power by jumper)	
Parallel	1 x D-sub 25-pin connector	
LAN (10 / 100)	1 x RJ45	
Cash Drawer	1 x RJ-11 (12V or 24V)	
Line-in	1	
Line-out	1	
DC Jack	1 x DC Jack latch type	
Internal Interface		
2nd VGA Output	10-pin header	
USB	2	
COM	2	
Control/Indicator		
Power Button	1	
Power		
Power Adapter	90W (19V / 5A)	

Main Name	POS 362	POS 365
Dimension (W x D x H)	310 X 285 X 293mm / 12.2" x 11.2" x 11.5"	386 X 285 X 356mm / 12.2" x 11.2" x 14.0"
Peripheral		
Customer Display	Flush mount / Pole type VFD	
2nd VGA	8.4"/10.4"/12.1" TFT LCD	
Magnetic Card Reader	3 Tracks (RS-232 / PS2 interface)	
Environment		
Operating Temperature	5℃ ~ 35℃ (41℉ ~ 95℉)	
Storage Temperature	-20℃ ~ 60℃ (-4℉ ~ 140℉)	
Operating Humidity	20% - 80% RH non condensing	
Storage Humidity	20% - 85% RH non condensing	
OS Support	Windows XP, WEPOS, XP Embedded, XP professional for Embedded, WIN 2000 professional Embedded, Linux	

7. Jumper Settings

B78 Motherboard



7.1. Connectors

Connector	Function
CN1	Audio Line Out
CN2	Audio Line In
CN13	COM5 for Touch
CN15	CPU FAN Connector
CN16	Hardware Reset
CN18	USB2
CN19	LCD Interface Connector
CN20	Inverter Connector
CN21	Card Reader Connector

Connector	Function
IED1	Primary IDE Connector
PRN1	Parallel Port
PWR1	+19V Power Adapter
RJ11_1	Cash Drawer Connector
RJ45_1	LAN (On Board)
RJ45_2	COM1, COM2, COM3, COM4
USB1	USB3, USB4
USB2	USB5, USB6

7.2. Jumper Settings

7.2.1. CMOS Operation Mode

Function	JP8
CMOS Normal	◎N/C
CMOS Reset	1-2

To clear the CMOS:

1) Remove AC power from the unit.
2) Open the cabinet.
3) Change the JP8 jumper setting from N/C to 1-2.
4) Wait 1 minute.
5) Change the JP8 jumper setting back to N/C.
6) Close the cabinet.
7) Apply AC power and continue.

7.2.2. Power Mode Setting

Function	JP6
ATX Power	◎N/C
AT Power	1-2

7.2.3. Cash Drawer Power Setting

Voltage	JP4
+12V	◎1-2
+24V	3-4
+19V	5-6

7.2.4. COM3 & COM 4 Power Setting

Function	JP3
COM3 PIN10_RI	◎1-2
COM3 PIN10_+5V	3-4
COM3 PIN10_+12V	5-6
COM4 PIN10_RI	◎7-8
COM4 PIN10_+5V	9-10
COM4 PIN10_+12V	11-12

7.2.5. Card Reader Setting

Function	◎Docking	On Board
JP11 (1-2)	N/C	1-2
JP11 (3-4)	N/C	3-4

7.2.6. LCD ID Setting

Panel Number	Resolution	LVDS		JP7			
		Bits	Channel	1-2	3-4	5-6	7-8
0	640 x 480	18	Single	SHORT	SHORT	SHORT	SHORT
1	800 x 600	18	Single	SHORT	SHORT	SHORT	OPEN
2	1024 x 768	18	Single	SHORT	SHORT	OPEN	SHORT
3	1280 x 1024	24	Dual	SHORT	SHORT	OPEN	OPEN
4	1024 x 768	24	Single	SHORT	OPEN	SHORT	SHORT
5	800 x 600	24	Single	SHORT	OPEN	SHORT	OPEN

7.2.7. COM2 RS232 / 485 / 422 Setting

Function	◎RS232	RS485	RS422
JP9 (1-2)	V		
JP9 (3-4)	V		
JP9 (4-6)		V	
JP9 (5-7)	V		
JP9 (7-8)		V	
JP9 (9-10)			V
JP10 (1-2)	V		
JP10 (3-4)		V	
JP10 (5-6)			V
JP10 (7-8)			V
JP10 (9-10)			V
JP10 (11-12)			V

Note: OPEN SHORT

7.3. Connectors Pin Definition

CN4: Speaker & MIC Connector

Pin 1	AMP_ORL	Pin 2	GND
Pin 3	GND	Pin 4	AMP_ORR
Pin 5	GND	Pin 6	MIC1

CN9: CD-IN Connector

Pin 1	CDIN_L	Pin 2	CDIN_REF
Pin 3	CDIN_R	Pin 4	CDIN_REF

CN11: Power Connector For 3.5” HDD

Pin 1	+12V	Pin 2	GND
Pin 3	GND	Pin 4	+5V

CN13: COM5

Pin 1	DCD#	Pin 2	RX#
Pin 3	TX#	Pin 4	DTR#
Pin 5	GND	Pin 6	DSR#
Pin 7	RTS#	Pin 8	CTS#
Pin 9	RI	Pin 10	+5V

CN15: CPU FAN Connector

Pin 1	+5V	Pin 2	Feedback
Pin 3	GND		

CN18: USB 2

Pin 1	+5V_USB1	Pin 2	USB20_R_P1
Pin 3	USB20_R_P1+	Pin 4	GND

CN19: LVDS Interface

Pin 1	LVDS_B0+	Pin 2	LVDS_A3+
Pin 3	LVDS_B0-	Pin 4	LVDS_A3-
Pin 5	GND	Pin 6	GND
Pin 7	LVDS_B1+	Pin 8	LVDS_CLKA+
Pin 9	LVDS_B1-	Pin 10	LVDS_CLKA-
Pin 11	GND	Pin 12	GND
Pin 13	LVDS_B2+	Pin 14	LVDS_A2+
Pin 15	LVDS_B2-	Pin 16	LVDS_A2-
Pin 17	GND	Pin 18	GND
Pin 19	LVDS_B3+	Pin 20	LVDS_A1+
Pin 21	LVDS_B3-	Pin 22	LVDS_A1-
Pin 23	GND	Pin 24	GND
Pin 25	LVDS_CLKB+	Pin 26	LVDS_A0+
Pin 27	LVDS_CLKB-	Pin 28	LVDS_A0-
Pin 29	GND	Pin 30	GND
Pin 31	+5V_LCDVDD	Pin 32	+3.3V_LCDVDD
Pin 33	+5V_LCDVDD	Pin 34	+3.3V_LCDVDD
Pin 35	+5V_LCDVDD	Pin 36	+3.3V_LCDVDD
Pin 37	+5V_LCDVDD	Pin 38	+3.3V_LCDVDD
Pin 39	+5V_LCDVDD	Pin 40	+3.3V_LCDVDD

CN20: Inverter Connector

Pin 1	+12V_INV	Pin 2	+12V_INV
Pin 3	+12V_INV	Pin 4	+12V_INV
Pin 5	Back-Light Enable	Pin 6	N/C
Pin 7	N/C	Pin 8	Back-Light Enable
Pin 9	GND	Pin 10	GND
Pin 11	GND	Pin 12	GND

CN21: POS Card Reader Connector

Pin 1	+5V	Pin 2	+5V
Pin 3	KDATA_SIO_TO_MSR	Pin 4	KDATA_SIO_TO_MSR
Pin 5	KDATA_MSR_TO_GFINGER	Pin 6	KCLK_MSR_TO_GHINGER
Pin 7	RS232_6_RX#	Pin 8	RS232_6_TX#
Pin 9	RS232_6_CTS#	Pin 10	RS232_6_RTS#
Pin 11	KB_EN	Pin 12	GND
Pin 13	USB20_MSR_P0+	Pin 14	USB20_MSR_P0-
Pin 15	GND		

CN22: System FAN Connector

Pin 1	+5V	Pin 2	Feedback
Pin 3	GND		

CN23: IrDA Connector

Pin 1	+5V	Pin 2	IRDA_RX
Pin 3	IRDA_TX	Pin 4	GND

RJ45_2: COM1, COM2, COM3, COM4

Pin 1	N/C	Pin 2	RS232_1_DCD#
Pin 3	RS232_1_DSR#	Pin 4	RS232_1_RX#
Pin 5	RS232_1_RTS#	Pin 6	RS232_1_TX#
Pin 7	RS232_1_CTS#	Pin 8	RS232_1_DTR#
Pin 9	GND	Pin 10	RS232_1_RI
Pin 11	N/C	Pin 12	RS232_2_DCD#
Pin 13	RS232_2_DSR#	Pin 14	RS232_2_RX#
Pin 15	RS232_2_RTS#	Pin 16	RS232_2_TX#
Pin 17	RS232_2_CTS#	Pin 18	RS232_2_DTR#
Pin 19	GND	Pin 20	RS232_2_RI

RJ45_2: COM1, COM2, COM3, COM4

Pin 21	N/C	Pin 22	RS232_3_DCD#
Pin 23	RS232_3_DSR#	Pin 24	RS232_3_RX#
Pin 25	RS232_3_RTS#	Pin 26	RS232_3_TX#
Pin 27	RS232_3_CTS#	Pin 28	RS232_3_DTR#
Pin 29	GND	Pin 30	RS232_3_RI
Pin 31	N/C	Pin 32	RS232_4_DCD#
Pin 33	RS232_4_DSR#	Pin 34	RS232_4_RX#
Pin 35	RS232_4_RTS#	Pin 36	RS232_4_TX#
Pin 37	RS232_4_CTS#	Pin 38	RS232_4_DTR#
Pin 39	GND	Pin 40	RS232_4_RI

JP1: VGA Port

Pin 1	GND	Pin 2	CRT_R
Pin 3	GND	Pin 4	CRT_G
Pin 5	GND	Pin 6	CRT_B
Pin 7	GND	Pin 8	CRT_HSYNC
Pin 9	GND	Pin 10	CRT_VSYNC

JP2: VGA Power

Pin 1	+12	Pin 2	GND
Pin 3	+12	Pin 4	GND

8. BIOS Settings

8.1. BIOS Setup Utility

The BIOS setup defines how the system is configured. You need to run this program the first time you configure this product. You may need to run it again if you change the configuration.
You need to connect a PC keyboard to the keyboard connector to run the BIOS setup utility.

8.2. Starting the BIOS Setup

1. Turn on or reboot this product.
2. Press the DEL key immediately after the product is turned on, or press the DEL key when the following message is displayed during POST (the Power on Self-Test).

   Press DEL to enter SETUP.

3. The main menu of the BIOS setup is displayed.
4. If the supervisor password is set, you must enter it here.

8.3. When a Problem Occurs

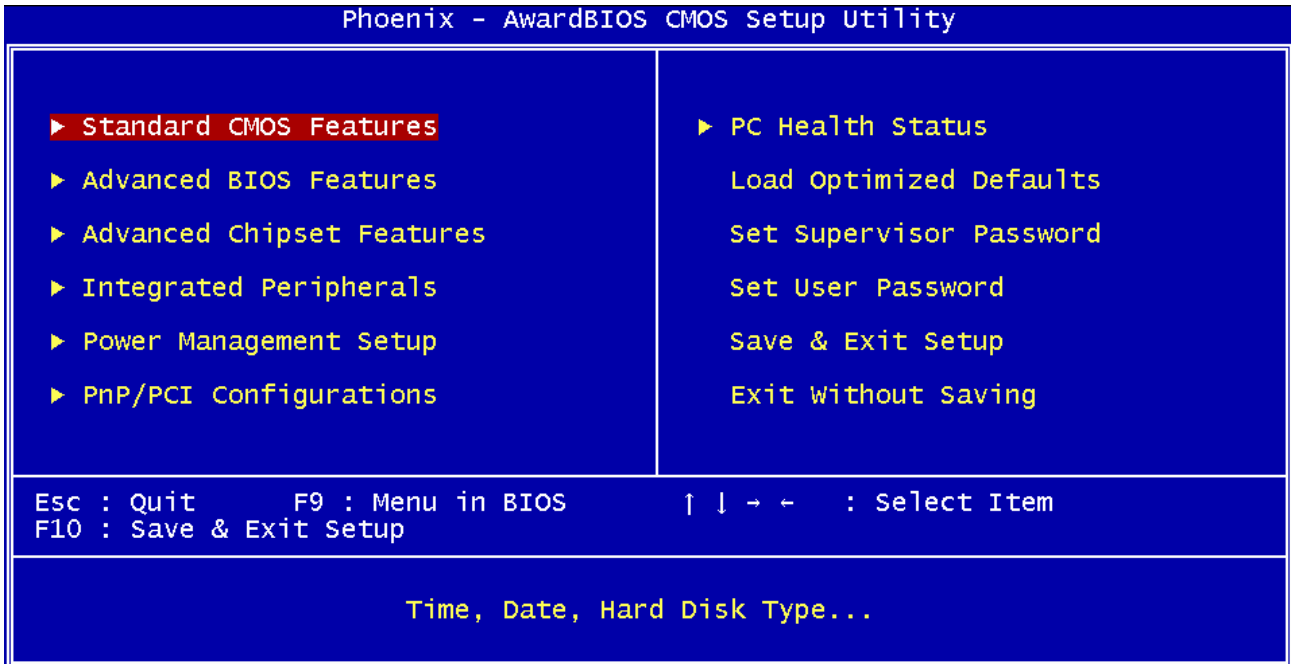
If, after making and saving system changes with the Setup utility, you find that this product no longer boots, start the BIOS setup and execute the following.

Load Optimized Defaults

8.4. BIOS Main Menu

When the BIOS Main Menu is displayed, the following items can be selected. Use the arrow keys to select items and the Enter key to accept and enter the sub-menu.

Note: The BIOS menu below is from B78 BIOS version B78FV10.BIN. If you have a different BIOS version, the contents of the menu may different.


Phoenix - AwardBIOS CMOS Setup Utility
Standard CMOS Features
Advanced BIOS Features
Advanced Chipset Features
Integrated Peripherals
Power Management Setup
PnP/PCI Configurations
PC Health Status
Load Optimized Defaults
Set Supervisor Password
Set User Password
Save & Exit Setup
Exit Without Saving
Esc : Quit F9 : Menu in BIOS ↑ ↓ → ← : Select Item
F10 : Save & Exit Setup
Time, Date, Hard Disk Type...

Standard CMOS Features
Use this menu for basic system configuration.

Advanced BIOS Features
Use this menu to set the Advanced Features available on the system.

Advanced Chipset Features
Use this menu to change the values in the chipset registers and optimize the system's performance.

Integrated Peripherals
Use this menu to specify your settings for integrated peripherals.

Power Management setup
Use this menu to specify your settings for power management.

PnP/PCI Configurations
This entry appears if your system supports Plug and Play and PCI Configuration.

PC health status
Displays CPU, System Temperature, Fan Speed, and System Voltages Value.

Load Optimized Defaults
Use this menu to load the BIOS default values, i.e., factory settings for optimal performance system operations. While Award has designed the custom BIOS to maximize performance, the factory has the option to change these defaults to meet their needs.

Set Supervisor Password
Enables you to change, set, or disable the supervisor or user password.

Set Password
Change, set, or disable the password. It allows you to limit access to the system and to the setup, or just to the setup.

Save & exit setup
Save CMOS value changes to CMOS and exits setup.

Exit without saving
Ignores all CMOS value changes and exits setup.